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EXAMINER

LOVEL, KIMBERLY M

ART UNIT

PAPER NUMBER

2167

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/809,171	Applicant(s) MARIA MEIJER ET AL.	
	Examiner Kimberly Lovel	Art Unit 2167	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 March 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>7/2/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-31 are rejected.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on 2 July 2004 was filed after the mailing date of the application on 25 March 2004. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Drawings

3. The drawings are objected to because Fig 10 depicts an item 1000, however, the specification on page 22, line 13 and page 23, line 20 describes an item 1010 (exemplary environment) instead of an item 1000. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet

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submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

4. Claims 2-5, 7-12, 15-17 and 19-28 are objected to because of the following informalities:

Claims 2-5, 7-12, 15-17 and 19-28 lack a transition word such as wherein. For example, claim 2 recites, "the system of claim 1, the first construct." It is suggested that the claim recites, "the system of claim 1, wherein the first construct."

Claim 3, line 4 recites "use interface construct" instead of "user interface construct."

Appropriate correction is required.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 1-12, 29 and 31 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

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Regarding claims 1 and 31, the claims are for a system. However, all of the elements claimed could be reasonably interpreted in light of the disclosure by an ordinary artisan as being software alone, and thus is directed to software *per se*, which is non-statutory.

According to MPEP section 2106:

Data structures not claimed as embodied in computer-readable media are descriptive material *per se* and are not statutory because they are not capable of causing functional change in the computer. See, e.g., *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure *per se* held nonstatutory). Such claimed data structures do not define any structural and functional interrelationships between the data structure and other claimed aspects of the invention which permit the data structure's functionality to be realized. In contrast, a claimed computer-readable medium encoded with a data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure's functionality to be realized, and is thus statutory.

Therefore, in order for such a software claim to be statutory, it must be claimed in combination with an appropriate medium and/or hardware to establish a statutory category of invention and enable any functionality to be realized.

Claims 2-12, which are dependent on the system of claim 1, fail to overcome the deficiencies of claim 1, and therefore are rejected on the same grounds.

Regarding claim 29, the claim is directed towards a data packet transmitted between two or more computers, which is considered to represent a signal. A signal is considered to be nonstatutory subject matter because it does not fall into any of the four statutory categories of invention. Also, claim 29 just merely describes the arrangement of the data being transferred, which is

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considered to represent non-functional descriptive material. Non-functional descriptive material is considered to be nonstatutory subject matter.

To allow for compact prosecution, the examiner will apply prior art to these claims as best understood, with the assumption that applicant will amend to overcome the stated 101 rejections.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 1-6, 12-16, 18-19, 26 and 29-31 are rejected under 35 U.S.C. 102(e) as being anticipated by US PGPub 2005/0160108 to Charlet et al (hereafter Charlet et al).

Referring to claim 1, Charlet et al disclose a system [system 400] that maps a first construct [XML document 202] to a second construct [hierarchical database 204] ([0061]), comprising:

a bank [database schema 304] that stores at least one of a set of suppress field labels and a set of introduce field labels (see [0057] – the element names 308 that match the database field names 306 are considered to represent the set of suppress field labels and the set of introduce field levels since they are

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used in the mapping of an XML document 202 into a hierarchical database 204);
and

a mapping component [mapping module 206] that utilizes at least one of a suppress field label and an introduce field label to facilitate mapping (see [0062], lines 1-3 and [0071] – mapping module 206 – uses XML schema 302 and database schema 304) the first construct [XML document 202] to the second construct [hierarchical database 204].

Referring to claim 2, Charlet et al disclose the system of claim 1, the first construct is a named [XML element name] or an anonymous construct and the second construct is a named [database field name] or an anonymous construct, and the mapping comprises one of transforming the first named construct to the second named construct (see [0057] and [0071] – each XML element name is matched to a database field name); the first named construct to the second anonymous construct; the first anonymous construct to the second named construct; and the first anonymous construct to the second anonymous construct.

Referring to claim 3, Charlet et al disclose the system of claim 1, the first construct is one of a markup language construct [XML document 202], an object oriented language construct, a relational construct and a user interface construct, and the second construct is one of a markup language construct, an object oriented language construct, a relational construct [hierarchical database 204] and a user interface construct (see [0061], lines 1-3).

Referring to claim 4, Charlet et al disclose the system of claim 3, the markup language construct is one of an XML [XML document 202] (see [0061],

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lines 1-3) and a CLR construct, the object oriented language construct is one of a C++, a C#, a Java and a Visual Basic construct, and the relational construct is a SQL construct (see [0067], lines 3-11 – the input [first construct] can be a SQL query).

Referring to claim 5, Charlet et al disclose the system of claim 1, the mapping is isomorphic (see [0064], lines 3-6 and [0073], lines 8-11 – according to page 9, line 11 of applicants' specification, an isomorphic mapping is a 1:1 mapping).

Referring to claim 6, Charlet et al disclose the system of claim 1, further comprising a mapping file that provides one or more of a default mapping, a user customized mapping, and a mediating schema [XML schema 302 and database schema 304] that facilitates mapping the first construct [XML document 202] to the second construct [hierarchical database 204] (see [0061] and [0062], lines 1-3).

Referring to claim 12, Charlet et al disclose the system of claim 1, the mapping component performs at least one of the following: serializes an instance of the first construct to the second construct; deserializes an instance of the first construct to the second construct; persists the first construct to the second construct; restores the first construct from the second construct; publishes the first construct [XML document] in the second construct [hierarchical database] (see [0049] – the data from the XML document is passed to the hierarchical database and inserted); shreds the first construct from the second construct; and binds the first construct to the second construct.

Referring to claim 13, Charlet et al disclose a method that transforms constructs between domains, comprising:

receiving a construct [XML document 202] (see [0065], lines 1-7);

obtaining a mapping [metadata schema 208] associated with the construct [XML document 202] (see [0070]-[0071]); and

employing the mapping to transform the construct [XML document] from a first domain [markup – an XML document is written in a markup language] to a second domain [relational – a hierarchical database is considered to represent a relational database] (see [0072], lines 1-8).

Referring to claim 14, Charlet et al disclose the method of claim 13, further comprising transforming one of a named construct [XML element name] to a different named construct [database field name] (see [0057] and [0071] – each XML element name is matched to a database field name); a named construct to an anonymous construct; an anonymous construct to a different anonymous construct, and an anonymous construct to a named construct.

Referring to claim 15, Charlet et al disclose the method of claim 13, the transformation is lossless (see [0064], lines 3-6 and [0073], lines 8-11 – according to page 9, line 11 of applicants' specification, a lossless transformation is a 1:1 mapping).

Referring to claim 16, Charlet et al disclose the method of claim 13, the mapping comprises one or more of a suppress field label, an introduce field label, a default mapping, a user customized mapping, and a mediating schema [XML schema 302 and database schema 304] (see [0061] and [0062], lines 1-3).

Referring to claim 18, Charlet et al disclose a method that transforms constructs, comprising:

providing a construct [XML document 202] to transform (see [0065], lines 1-7);

retrieving a mapping [metadata schema 208] that facilitates construct transformation (see [0070]-[0071]); and

utilizing the mapping to transform the construct (see [0072], lines 1-8 – transforming XML document 202 to hierarchical database 204).

Referring to claim 19, Charlet et al disclose the method of claim 18, the mapping comprises at least one of a suppress field label, an introduce field label, a default mapping, a user customized mapping, and a mediating schema.

Referring to claim 26, Charlet et al disclose the method of claim 18, the transformation comprises publishing a markup construct in a relational construct (see [0049] – the data from the XML document is passed to the hierarchical database and inserted).

Referring to claim 29, Charlet et al disclose a data packet transmitted between two or more computer components that facilitates transforming constructs (see [0039]), comprising: at least one of a set of suppress field labels, a set of introduce field labels and a mediating schema [XML schema 302 and database schema 304] that is utilized to transform a first construct [XML document 202] to a second construct [hierarchical database 204] (see [0061] and [0062], lines 1-3).

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Referring to claim 30, Charlet et al disclose a computer readable medium storing computer executable components to facilitate transforming constructs (see [0039]), comprising:

a component that receives a construct [XML document 202] to transform (see [0065], lines 1-7);

a component that provides a mapping [metadata schema 208] that facilitates construct [XML document 202] transformation (see [0070]-[0071]); and

a component that utilizes the mapping to transform the construct [XML document 202] to a different domain space [going from an XML document, which is considered to represent the markup domain to a hierarchical database, which is considered to represent a relational domain] (see [0072], lines 1-8).

Referring to claim 31, Charlet et al disclose a construct transformation system, comprising:

means [database schema 304] for determining a mapping between constructs (see [0057]); and

means [mapping module 206] for employing the mapping to transform a first construct [XML document 202] to a second construct [hierarchical database 204] (see [0062], lines 1-3 and [0071]).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to

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be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. Claims 7-8, 10 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over US PGPub 2005/0160108 to Charlet et al as applied respectively to claims 6 and 19 above, and further in view of US Patent No 6,658,429 to Dorsett, Jr. (hereafter Dorsett).

Referring to claim 7, Charlet et al disclose the feature of mapping. However, Charlet et al fail to explicitly disclose the further limitation of a user customized mapping. Dorsett disclose a system for mapping XML data to object data, including the further limitation of user customized mapping (see column 17, line 54 – column 18, line 6) defines a construct structure to suppress and introduce labels (see column 18, lines 7-17) in order to increase the amount of input and customization that the developer has with transforming the data.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the user customized ability disclosed by Dorsett's system as a substitute to the machine generated mapping. One would have motivated to do so in order to increase the amount of input and customization that the developer has with transforming the data.

Referring to claim 8, Charlet et al disclose the feature of mapping.

However, Charlet et al fail to explicitly disclose the further limitation of a user customized mapping. Dorsett disclose a system for mapping XML data to object data, including the further limitation of user customized mapping comprises at least one of an annotating type (see column 18, lines 7-17) and an annotating schema in order to increase the amount of input and customization that the developer has with transforming the data.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the user customized ability disclosed by Dorsett's system as a substitute to the machine generated mapping. One would have motivated to do so in order to increase the amount of input and customization that the developer has with transforming the data.

Referring to claim 10, Charlet et al disclose the feature of mapping with a mediating schema. However, Charlet et al fail to explicitly disclose the further limitation of a using the schema to transform the constructs to an intermediate representation. Dorsett disclose a system for mapping XML data to object data, including the further limitation of the mediating schema transforms constructs to an intermediate representation at least one of before, during and after

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transforming the first construct (see column 11, lines 17-20) in order to increase the efficiency and accuracy of mapping XML data to object data.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the feature of an intermediate structure as disclosed by Dorsett's system with Charlet et al's system. One would have motivated to do so in order to increase the efficiency and accuracy of mapping XML data to object data.

Referring to claim 20, Charlet et al disclose the feature of mapping with a mediating schema. However, Charlet et al fail to explicitly disclose the further limitation of a using the schema to transform the constructs to an intermediate representation. Dorsett disclose a system for mapping XML data to object data, including the further limitation of the mediating schema transforms constructs to an intermediate representation at least one of before, during and after transforming the first construct (see column 11, lines 17-20) in order to increase the efficiency and accuracy of mapping XML data to object data.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the feature of an intermediate structure as disclosed by Dorsett's system with Charlet et al's method. One would have motivated to do so in order to increase the efficiency and accuracy of mapping XML data to object data.

11. Claims 11 and 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over US PGPub 2005/0160108 to Charlet et al as applied

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respectively to claims 1 and 18 above, and further in view of US PGPUB 2004/0039964 to Russell et al (hereafter Russell et al).

Referring to claim 11, Charlet et al disclose a first construct and a second construct. However, Charlet et al fail to explicitly disclose the further limitation of complex or simple constructs. Russell et al disclose type mapping data between heterogeneous formats (see abstract), including the further limitation of the first construct is a complex or a simple construct and the second construct is a complex or a simple construct (see [0035], lines 6-13 – complex constructs) in order to increase the efficiency and accuracy of mapping XML complex objects.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the feature of complex structures as disclosed by Russell et al with Charlet et al's system. One would have motivated to do so in order to increase the efficiency and accuracy of mapping XML complex objects (Russell et al: see [0005], lines 13-20).

Referring to claim 21, Charlet et al disclose a first construct and a second construct. However, Charlet et al fail to explicitly disclose the further limitation of complex or simple constructs. Russell et al disclose type mapping data between heterogeneous formats (see abstract), including the further limitation the received construct is a complex or a simple construct and the transformed construct is a complex or a simple construct (see [0035], lines 6-13 – complex constructs) in order to increase the efficiency and accuracy of mapping XML complex objects.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the feature of complex structures as disclosed by Russell et al with Charlet et al's method. One would have motivated to do so in order to increase the efficiency and accuracy of mapping XML complex objects (Russell et al: see [0005], lines 13-20).

Referring to claim 22, Charlet et al disclose transforming constructs. However, Charlet et al fail to explicitly disclose the further limitation wherein the transformation comprises serializing a markup construct to an object construct. Russell et al disclose type mapping data between heterogeneous formats (see abstract), including the further limitation wherein the transformation comprises serializing a markup construct [XML] to an object construct [JavaBean] (see [0061], lines 1-4) so in order to increase the efficiency of transforming XML into objects.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the feature of a markup construct and an object construct as disclosed by Russell et al with Charlet et al's method for transforming constructs. One would have motivated to do so in order to increase the efficiency of transforming XML into objects.

Referring to claim 23, Charlet et al disclose transforming constructs. However, Charlet et al fail to explicitly disclose the further limitation wherein the transformation comprises deserializing an object construct to a markup construct. Russell et al disclose type mapping data between heterogeneous formats (see abstract), including the further limitation wherein the transformation comprises

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deserializing an object construct [JavaBean] to a markup construct [XML] (see [0090], lines 10-15) in order to increase the efficiency of transforming XML into objects.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the feature of a markup construct and an object construct as disclosed by Russell et al with Charlet et al's method for transforming constructs. One would have motivated to do so in order to increase the efficiency of transforming XML into objects.

12. Claims 9, 17, 24, 25, 27 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over US PGPub 2005/0160108 to Charlet et al as applied respectively to claims 6, 13 and 18 above, and further in view of US Patent No 6,125,391 to Meltzer et al (hereafter Meltzer et al).

Referring to claim 9, Charlet et al disclose transforming constructs. However, Charlet et al fail to explicitly disclose the further limitation wherein the default mapping is based on one or more of a heuristic, an inference, a probability and machine learning. Meltzer et al disclose transforming constructs (see column 30, lines 13-21), including the further limitation wherein the default mapping is based on one or more of a heuristic, an inference, a probability and machine learning (see column 27, lines 4-8) in order to increase the efficiency of transforming constructs.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the feature for using a default mapping to transform

constructs as disclosed by Meltzer et al with Charlet et al's system for transforming constructs. One would have motivated to do so in order to increase the efficiency of transforming constructs.

Referring to claim 17, Charlet et al disclose transforming constructs.

However, Charlet et al fail to explicitly disclose the further limitation wherein the mapping is based on one or more of a heuristic, an inference, a probability and machine learning. Meltzer et al disclose transforming constructs (see column 30, lines 13-21), including the further limitation wherein the mapping is based on one or more of a heuristic, an inference, a probability and machine learning (see column 27, lines 4-8) in order to increase the efficiency of transforming constructs.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the feature for using a default mapping to transform constructs as disclosed by Meltzer et al with Charlet et al's method for transforming constructs. One would have motivated to do so in order to increase the efficiency of transforming constructs.

Referring to claim 24, Charlet et al disclose transforming constructs.

However, Charlet et al fail to explicitly disclose the further limitation wherein the transformation comprises persisting an object construct to a relational construct. Meltzer et al disclose transforming constructs (see column 30, lines 13-21), including the further limitation wherein the transformation comprises persisting an object construct to a relational construct (see column 33, lines 9-12) in order to increase the efficiency of transforming objects into relations.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the feature of a relational construct and an object construct as disclosed by Russell et al with Charlet et al's method for transforming constructs. One would have motivated to do so in order to increase the efficiency of transforming objects into relations.

Referring to claim 25, Charlet et al disclose transforming constructs. However, Charlet et al fail to explicitly disclose the further limitation wherein the transformation comprises restoring an object construct from a relational construct. Meltzer et al disclose transforming constructs (see column 30, lines 13-21), including the further limitation wherein the transformation comprises restoring an object construct from a relational construct (see column 33, lines 9-12) in order to increase the efficiency of transforming objects into relations.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the feature of a relational construct and an object construct as disclosed by Russell et al with Charlet et al's method for transforming constructs. One would have motivated to do so in order to increase the efficiency of transforming objects into relations.

Referring to claim 27, Charlet et al disclose transforming constructs. However, Charlet et al fail to explicitly disclose the further limitation wherein the transformation comprises shredding a relational construct to markup construct. Meltzer et al disclose transforming constructs (see column 30, lines 13-21), including the further limitation wherein the transformation comprises shredding a

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relational construct to markup construct (see column 33, lines 9-12) in order to increase the efficiency of transforming relations into markup.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the feature of a relational construct and a markup construct as disclosed by Russell et al with Charlet et al's method for transforming constructs. One would have motivated to do so in order to increase the efficiency of transforming relations into markup.

Referring to claim 28, Charlet et al disclose transforming constructs. However, Charlet et al fail to explicitly disclose the further limitation wherein the transformation comprises binding the received construct to a user interface, the received construct is one of an object construct, a markup construct, a relational construct and a disparate user interface construct. Meltzer et al disclose transforming constructs (see column 30, lines 13-21), including the further limitation wherein the transformation comprises binding the received construct to a user interface, the received construct is one of an object construct, a markup construct, a relational construct and a disparate user interface construct (see column 7, line 61 – column 8, line 1 – binding two user interfaces) in order to increase the efficiency of transforming constructs.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the feature binding constructs as disclosed by Russell et al with Charlet et al's method for transforming constructs. One would have motivated to do so in order to increase the efficiency of transforming constructs.

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Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimberly Lovel whose telephone number is (571) 272-2750. The examiner can normally be reached on 8:00 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cottingham can be reached on (571) 272-7079. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Kimberly Lovel
Examiner
Art Unit 2167

12 September 2006
kml


JOHN COTTINGHAM
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100